AB005. SOH23ABS_086. Robot-assisted laparoscopic retro-peritoneal lymphadenectomy during right radical nephrectomy: operative technique with a dual-console Xi da Vinci surgical system

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Background: Retro-peritoneal lymphadenectomy (RPLND) may benefit in selected cases of locally advanced renal cell cancer during radical nephrectomy (RN). Open RPLND has significant morbidity and this can be minimised with the use of minimally invasive surgery (MIS). Aim is to describe our technique of robotic-assisted laparoscopic RPLND in a complex case of locally advanced multi-focal right renal tumour with hilar, para-caval and retro-caval lymphadenopathy.

Methods: A 72-year-old gentleman with a background history of dyslipidaemia and hypertension presented to us incidental finding of two radiologically suspicious right renal lesions (5.5 and 1.5 cm) and hilar, para-caval and large 2.8 cm retro-caval lymphadenopathy. His case was discussed in our multidisciplinary meeting. He opted for right Radical Nephrectomy with *en block* extended RPLND of para-caval and retro-caval lymph nodes. We describe operative details and our technique in video.

Results: Following general anaesthesia the patient was positioned into left lateral-decubitus position without table flexion. Intra-operatively we encountered extensive adhesion with inferior vena cava and retro-peritoneum due to desmoplastic reaction. En-block excision of right kidney with tumour, adrenal gland, right para-caval and retro-caval lymph nodes was performed with the use of da Vinci dual console robotic platform. There were no intra-operative or post-operative complications. Operative time was 180 minutes. Blood loss was 75 mL.

Conclusions: Robotic-assisted laparoscopic RPLND is technically challenging but feasible and can be performed safely with the advantages of MIS.

Keywords: Minimally invasive surgery (MIS); para-caval; retro-caval; retro-peritoneal lymphadenectomy (RPLND); robot-assisted laparoscopic